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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,816	04/17/2001	Joachim Gally	MERCK-2242	5535
23599	7590	11/19/2004	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			OGDEN JR, NECHOLUS	
			ART UNIT	PAPER NUMBER
			1751	

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/835,816

Applicant(s)

GALLY ET AL.

Examiner

Necholus Ogden

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,11,13-15,18,22 and 24-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,11,13-15,18,22 and 24-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/7/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Response to Amendment***

1. Claims 3 and rejected under 35 U.S.C. 112, second paragraph, is withdrawn in view of applicant's amendment.

Claim 23 rejected under 35 U.S.C. 101 is withdrawn in view of applicant's amendment.

***Claim Rejections - 35 USC § 103***

2. Claims 1-18 and 22-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Salyer et al in view of Lane et al is withdrawn in view of applicant's arguments.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-2, 4, 11, 13-15, 18, 22 and 24-44 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 35-37, 39 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Achard et al (4,816,173).

Achard et al disclose a heat sink material for thermal energy storage comprising materials that have a solid-to-solid phase transition (see col. 1, line 6-col. 5, line 21 and

clams). As this reference teaches all of the instantly required it is considered anticipatory.

6. Claims 1, 35-38 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al (4,487,856).

Anderson et al disclose a heat storage material comprising an organic latent material and a polymer to form a solid-to-solid phase transition (see col. 1, line 13 to col. 4 and claims). As this reference teaches all of the instantly required it is considered anticipatory.

7. Claims 1, 29, 35-38 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/05184.

WO '184 discloses a heat retentive food serving ware comprising a core with a phase change material that has a solid-state transition (see abstract; pg. 10, line 29-pg. 14, line 20 and claims).

As this reference teaches all of the instantly required it is considered anticipatory.

8. Claims 1, 13-15, 35-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Benson et al (5,202,150).

Benson et al disclose an impregnated porous material with a solid phase change material in a finely divided form (col. 1, line 12-col. 6, line 23).

As this reference teaches all of the instantly required it is considered anticipatory.

9. Claims 1, 29, 35-39, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 93/15625.

WO '625 discloses a foam based microcapsule phase change material with a solid transition phase (see col. 6, lines 15-21 and claims).

As this reference teaches all of the instantly required it is considered anticipatory.

10. Claims 1, 15, 29, 35-40 are rejected under 35 U.S.C. 102(b) as being anticipated by EP (0306202).

EP '202 discloses a fiber material with thermal storage properties that exhibit a solid-state phase transition (see pg. 2-pg. 6).

As this reference teaches all of the instantly required it is considered anticipatory.

11. Claims 1, 11, 13-15, 22, 29-30, 35-39, 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Bryant et al (5,366,801).

Bryant et al discloses a coated fabric filled with phase change material that exhibits a solid-to-solid phase transition (see abstract and col. 2, line 4 –col. 6).

As this reference teaches all of the instantly required it is considered anticipatory.

12. Claims 1-2, 4, 11, 18, 20, 24-28, 31-34 and 44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over "Polymorphism in Dialkyl ammonium Chloride" by Van Oort et al.

Van Oort et disclose teachings of polymorphisms of dialkyl ammonium chlorides and their use as phase change heat storage material in solid to solid state transitions (pages 168-176).

As this reference teaches all of the instantly required it is considered anticipatory. In the alternative, Van Oort et al is silent with respect to the particle size of the n-alkyl ammonium chloride. However, it would have been inherent to the compounds of Van

Oort et al to comprise said particle size because the compounds are identical and further encompass the same phase transition. Therefore, one skilled in the art would inherently expect said n-alkyl ammonium chlorides of Van Oort et al to encompass said particle size.

### ***Conclusion***


13. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 9-7-04 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Necholas Ogden whose telephone number is 571-272-1322. The examiner can normally be reached on M-T and Th-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra N. Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nicholas Ogden  
Primary Examiner  
Art Unit 1751

No  
11-18-04